

Exhibit A

Part 5 of 5

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 one and then relate what I'm reading
2 to the pickle liquor situation.

3 Okay?

4 A. Okay.

5 Q. The very first one says,
6 "The selected remedy includes the
7 following major components," and then
8 there's the very first one.

9 "Soil aeration and
10 treatment of VOC hot spots,
11 mechanical aeration of soil hot spot
12 areas to remove high level of VOCs,
13 and then (primarily TCE and benzene)
14 in a temporary on-site treatment
15 building equipped with carbon
16 filters."

17 Now, looking at just that
18 first item under the remedy, under
19 the ROD remedy, do pickle liquors, in
20 your view, have any relation to that
21 at all, and, if so, what relation?

22 A. To the soil aeration --

23 Q. Yes. Do you want me to
24 read the first part again?



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 A. Yes. I'm not sure what you
2 are reading from.

3 Q. Yes. The very first one.

4 MR. FACKENTHAL: Off the
5 record.

6 (Discussion off the
7 record.)

8 BY MR. FACKENTHAL:

9 Q. Back on the record, you are
10 reading No. 1 to yourself. I just
11 read it for the record. Will you
12 read it to yourself?

13 A. Okay.

14 Q. Okay. My question was can
15 you relate the pickle liquors which
16 were allegedly disposed of at the
17 Boarhead Farms site to that
18 particular remedy?

19 A. I think we talked about
20 this very briefly yesterday. Only to
21 the extent that if wastes such as
22 pickle liquor wastes that may have
23 been acidic tended to spread out the
24 contamination and increase the volume



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 of soil that needed to be aerated.

2 Q. Looking at it in two ways,
3 the pickle liquor itself, as opposed
4 to what the pickle liquor might have
5 done to other elements that may have
6 been there, how it affected any other
7 elements, just looking at the pickle
8 liquor itself, is that in any way
9 related to No. 1?

10 A. Pickle liquor should
11 include substantial quantities of
12 volatiles, so that would not have
13 been a remedy for pickle-liquor-
14 impacted soil.

15 Q. And looking at the second
16 aspect of that, that is how it might
17 have affected properties, chemicals
18 that were inherently there, aside
19 from what might have been in the
20 pickle liquor, can you -- and I know
21 you have testified to this for the
22 last couple of days, but can you
23 relate what the pickle liquors may
24 have done to those chemicals,



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 chemicals of concern?

2 A. They could have in general
3 spread out the -- as we were just
4 talking about, they could have spread
5 out and made less concentrated the
6 chemicals that were there, including
7 volatile chemicals, which would have
8 increased the volume of soil that
9 needed to be aerated.

10 Q. But you cannot tell that
11 that happened without knowing an
12 awful lot more about the site, is
13 that correct, and where the pickle
14 liquors were disposed of?

15 A. That would be correct, yes.

16 Q. So it may have been that
17 they had no effect, or it may have
18 been that they had a great effect,
19 you just don't know?

20 A. That's correct.

21 Q. Now, we looked at the
22 second one, and for the people on the
23 telephone I'm going to read it, it
24 says, "Excavation of off-site



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 disposal of buried drums, excavation
2 of off-site disposal of buried drums
3 to reduce the potential for continued
4 migration of contaminants to the soil
5 and groundwater as well as to reduce
6 exposure risk."

7 Now, again, the first part
8 of what we talked about before, just
9 what's in the pickle liquor itself,
10 would that in any way be related to
11 that second remedy?

12 A. If it was disposed of in
13 drums. This part of the remedy has
14 to do with the disposal of buried
15 drums.

16 Q. That's correct, yes.

17 A. So if the pickle liquor was
18 disposed of in buried drums or if
19 bulk pickle liquor was disposed of in
20 soil areas that were excavated with
21 the buried drums, then that would
22 have been a connection between pickle
23 liquor and this part of the remedy.

24 Q. Okay. But, again, that's



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 not something you would know about;
2 that is, you don't know where, if
3 any, of the pickle liquor was
4 disposed of in relation to the
5 location of the buried drums?

6 MR. HARRIS: Objection to
7 the form.

8 THE WITNESS: I don't
9 recall information specifically on
10 where pickle liquor may have been
11 disposed of.

12 BY MR. FACKENTHAL:

13 Q. So that you would not know
14 whether pickle liquor was in the area
15 of these drums?

16 MR. HARRIS: Objection to
17 the form.

18 THE WITNESS: That's
19 right. I haven't seen any
20 information about where specifically
21 pickle liquor was disposed of.

22 BY MR. FACKENTHAL:

23 Q. I believe somewhere in your
24 report you said any acids,



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 particularly hydrochloric acid which
2 is the particular type of pickle
3 liquor I'm talking about, could have
4 had some effect on the drums. Right?

5 A. Correct.

6 Q. Assume that it was a new
7 steel drum, for an example, and
8 assume that it was a solution of
9 pickle liquor of less than five
10 percent, would that have had a
11 significant effect, and they came
12 together, would the pickle liquor
13 have any substantial effect on that
14 steel drum?

15 A. It could, yes. Any
16 increase in the corrosive
17 characteristics of the material
18 that's in contact with the drum will
19 increase the deterioration of that
20 drum.

21 Q. Well, I used the word
22 significant kind of advisedly, how
23 long would it take for say a solution
24 of five percent or three to five



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 percent hydrochloric acid to erode a
2 new steel drum?

3 A. I don't know.

4 Q. It might take a decade, it
5 might take 50 years, for all you
6 know?

7 A. I couldn't say how long it
8 would take.

9 Q. Can you describe the
10 corrosivity of that type of pickle
11 liquor that I just described?

12 MR. HARRIS: Objection.
13 What was the description?

14 MR. FACKENTHAL: How
15 corrosive it is.

16 MR. HARRIS: Well, what
17 pickle liquor are we talking about?

18 MR. FACKENTHAL: The three
19 to five percent pickle liquor.

20 MR. HARRIS: And that's all
21 he knows about it.

22 MR. FACKENTHAL: That's all
23 he knows about it.

24 THE WITNESS: It's three to



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 five percent pickle liquor or three
2 to five percent hydrochloric acid?

3 BY MR. FACKENTHAL:

4 Q. Three to five percent
5 hydrochloric acid.

6 A. Well, you would need to
7 know -- you still cannot say anything
8 very informative or detailed about
9 that.

10 You would still need to
11 know, as we talked about earlier, the
12 concentration of that hydrochloric
13 acid, was it a concentrated
14 hydrochloric acid or a weak
15 hydrochloric acid.

16 Five percent concentrated
17 hydrochloric acid in a volume of
18 waste could be very corrosive.

19 Q. I misunderstood. I thought
20 when you were talking -- when I said
21 five percent that that meant that it
22 was five parts out of 100, the other
23 95 percent being water or something
24 inert. Isn't that so?



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 A. That would be of the bulk
2 wastes that you are talking about,
3 not of the hydrochloric acid.

4 Q. I'm sorry, I'm talking
5 about the bulk wastes.

6 A. That's what I was talking
7 about. The way that I understood
8 your hypothetical, you have five
9 parts of hydrochloric acid and 100
10 parts of bulk wastes.

11 Q. That's correct.

12 A. That could still be a very
13 corrosive liquid.

14 Q. So you would have to know a
15 lot more about it in order to answer
16 that question about how it would
17 attack the steel drums?

18 A. Certainly if you were
19 trying to estimate how long it would
20 take to eat through a new steel drum,
21 you would need to know a lot more
22 information.

23 Q. Okay. And, again, you have
24 no idea whether in fact any pickle



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 liquor affected any of the steel
2 drums.

3 MR. HARRIS: Objection.

4 THE WITNESS: My opinion
5 was based on if pickle liquor was
6 disposed of at the site and speaking
7 about whether or not it had an impact
8 on the drums is if that pickle liquor
9 was disposed of in a way that it came
10 in contact with drums it would
11 deteriorate those drums.

12 BY MR. FACKENTHAL:

13 Q. Well, really three
14 assumptions, if it were disposed of
15 and if it came into contact with the
16 drums and if were of such a
17 concentration that it could have a
18 significant impact, if all those ifs
19 were so, then it could.

20 Is that what you are
21 saying?

22 A. That's correct.

23 Q. All right. If you look at
24 No. 3, and again for the people on



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 the phone, "Groundwater extraction,
2 metals precipitation and air
3 stripping, continued extraction and
4 treatment of VOCs in groundwater via
5 the existing interceptor trench and
6 air stripping treatment system and
7 addition of a metals precipitation
8 unit to remove inorganics to reduce
9 contaminants in the groundwater to
10 below maximum contaminant levels,
11 MCLs."

12 Now, again, the same
13 two-part thing that we were talking
14 about with respect to the first two.

15 If you are looking at just
16 the pickle liquor itself, and keeping
17 in mind that this is -- well, strike
18 that.

19 Just looking at the pickle
20 liquor itself, what part of three, if
21 any, would that have to do with the
22 remedy, that third remedy?

23 MR. HARRIS: Ed, I just
24 want to make clear, are you talking



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 about the pickle liquor -- when you
2 say the pickle liquor, are you
3 talking about this pickle liquor here
4 you are describing to him or pickle
5 liquors in general?

6 MR. FACKENTHAL: Pickle
7 liquors in general, as he has in his
8 supplemental report.

9 MR. HARRIS: Okay.

10 THE WITNESS: Well, I guess
11 most directly any of the metals that
12 may be contained in pickle liquor
13 waste would contribute to the need of
14 the extraction system itself, the
15 need to remove groundwater.

16 The metals that are in
17 pickle liquor would have contributed
18 to the need to treat that groundwater
19 for metals, to reduce it to below
20 maximum contaminant levels.

21 The pickle liquor and the
22 metals that may have been contained
23 in the pickle liquor may have
24 necessitated the need to meet



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 discharge limits for the treated
2 water.

3 So those are some of the
4 ways that pickle liquor would have
5 been included in that part of the
6 remedy.

7 BY MR. FACKENTHAL:

8 Q. This remedy was designed
9 some, what, 20 years after the end of
10 the disposal period at Boarhead, as I
11 understand it. Is that correct? Is
12 that according to your understanding,
13 too?

14 A. Well, again, this was -- I
15 have never thought about this as --
16 this wasn't like a regulated landfill
17 site that had a disposal period per
18 se. I'm not sure when exactly the
19 disposal stopped at Boarhead Farms.

20 Q. Well, let's assume for the
21 moment that it stopped in about 1977
22 and that this ROD was I think
23 November of 1998, and of course it
24 had its going back a couple years



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 before that, but roughly a 20-year
2 span in between the end of the
3 disposal at the Boarhead site and the
4 drafting of these seven remedies that
5 we are talking about.

6 Now, would the hydrochloric
7 acid aspect of the pickle liquor have
8 remained for that 20 years in a
9 measurable way?

10 A. The hydrochloric acid
11 aspect?

12 Q. Yes.

13 A. I'm not sure what you mean
14 by aspect.

15 Q. Well, as I understand it,
16 the pickle liquor, one type of pickle
17 liquor -- the one I'm most interested
18 in is ferric chloride, so it's a
19 combination I suppose of hydrochloric
20 acid and iron. Am I correct?

21 A. Correct.

22 Q. Now, just looking at the
23 hydrochloric acid, would that have
24 been measurable some 20 years after



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 the last disposal, if any, of
2 hydrochloric acid at the site? Would
3 that still have been detected?

4 A. Hydrochloric acid or the
5 effects of the disposal of that
6 hydrochloric acid?

7 Q. No. Just the hydrochloric
8 acid for the moment.

9 A. I don't know that
10 hydrochloric acid was ever measured
11 at the site. They don't measure for
12 specific acids when they are sampling
13 soil in groundwater.

14 Q. But if there's a mixture,
15 not a mixture, a chemical component
16 of ferric chloride, could that have
17 been measured some 20 years later?

18 A. The iron component of that
19 most definitely could be measured.
20 Iron -- there's the same amount of
21 iron today as there was when the
22 earth was formed, so that doesn't go
23 away.

24 So if there was iron



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 disposed of at the site in 1973, that
2 iron was at the site before the
3 remedy was implemented. Unless it's
4 removed from the subsurface, it
5 continues to be there.

6 Q. Okay. Do you know, and
7 again we are talking about ferric
8 chloride, if the iron content was
9 below or above the maximum
10 contaminant level, as indicated in
11 Paragraph 3?

12 A. I don't know if it was or
13 not.

14 Q. Do you know what the
15 background level of iron was at the
16 time in any part of the Boarhead
17 Farms? When I say at the time, I'm
18 talking about the early '70s.

19 A. No, I don't.

20 Q. And do you know what the
21 iron content was in or about 1998?

22 A. No, I don't.

23 Q. And whether in either case
24 it was above or below the MCL?



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 A. First of all, iron doesn't
2 have an MCL.

3 Q. Really?

4 A. It has what is called an
5 SMCL, a secondary maximum contaminant
6 level.

7 Q. Explain that.

8 A. An MCL is a concentration
9 that is a health-based
10 concentration. For instance, TCE
11 will have an MCL for groundwater
12 that's five micrograms per liter.
13 That's based on human health impact.

14 Other compounds will have
15 what's referred to as secondary MCLs,
16 which are based on organoleptic
17 considerations, and iron is one of
18 those.

19 Q. Well, then looking at
20 number three, the removal of iron
21 would not be involved in number
22 three. Isn't that right?

23 A. No. It very much could be
24 involved in number three.



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 At least in the two -- the
2 last two aspects of number three, the
3 metals precipitation and the air
4 stripping, any iron that's in the
5 subsurface when it comes in contact
6 with oxygen will precipitate out.

7 And therefore before you
8 can effectively operate an air
9 stripping system, you have to remove
10 that iron.

11 Q. Look at No. 4, if you will,
12 installation of additional monitoring
13 wells. And the rest of that
14 paragraph just explains the need for
15 additional monitoring wells.

16 And the same question about
17 that, can you relate the pickle
18 liquor, as you have mentioned in your
19 supplemental report to that Item 4?

20 A. Well, I would say that it
21 relates at least in two ways. One,
22 again, to the extent that this pickle
23 liquor waste was acidic, it would
24 have increased the mobility of

**James DeCrescenzo Reporting, LLC**

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 contaminants in the subsurface.

2 And to the extent that
3 metals were contained in pickle
4 liquor waste, it would have required
5 and been part of the reason to
6 install monitoring wells to
7 characterize the concentration of
8 those metals in the subsurface.

9 Q. Then skip down to No. 6,
10 residential water treatment,
11 "Continued maintenance of the
12 granular activated carbon, GAC,
13 filters that were installed on --" it
14 means I guess or -- "the affected
15 residential water wells in the
16 surrounding area to prevent exposure
17 to contaminated groundwater from the
18 site."

19 You have already testified
20 a little bit about that. Did the
21 pickle liquor have any effect upon
22 those residential wells which you
23 know about, assuming that pickle
24 liquor were disposed of on the site?



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 A. Again, the residential
2 treatment systems were put in both
3 for organic and inorganic
4 contamination.

5 So the metals that were in
6 pickle liquors could have contributed
7 to the concentration of metals in the
8 groundwater that required treatment
9 from those private wells.

10 Q. Do you know of any of the
11 test results from the private wells
12 that indicated any ferric chloride or
13 iron that needed remediation?

14 A. I would have to go back and
15 look at the underlying data. I don't
16 recall sitting here right now.

17 Q. And, again, you have, I
18 will ask this way, do you have any
19 knowledge about whether pickle liquor
20 and the metallic components of pickle
21 liquor ever did get to the
22 residential wells?

23 A. Do I have knowledge about
24 whether or not any of the



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 contaminants -- the metals that are
2 in pickle liquor, or specifically
3 pickle liquor metals? I think that's
4 two different things.

5 Q. I didn't realize they were
6 two different things.

7 A. Well, you could have --
8 there could be various sources of
9 chromium at the site, for instance.

10 One question would be
11 whether or not there's evidence that
12 chromium was in the private wells
13 versus evidence that chromium from
14 pickle liquors was in the private
15 wells.

16 Q. I'm talking about -- again,
17 I'm going to focus on just ferric
18 chloride. Do you have any knowledge
19 about whether iron, iron in any kind
20 of pickle liquor component, iron got
21 to the residential wells?

22 A. Not sitting here right now,
23 no.

24 Q. You said you read the



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 Franklin Mink report. I believe you
2 said that you did read the Franklin
3 Mink report. Yes?

4 A. Yes, I did.

5 Q. Do you know Dr. Mink?

6 A. Yes, I do.

7 Q. You used to work in the
8 same place?

9 A. He used to be employed at
10 Environ, yes.

11 Q. Over what period of time
12 did you know him?

13 A. Approximately -- maybe, I
14 don't know, 1999, 2000, 2001, maybe
15 slightly before then.

16 Q. Did you work with him?

17 A. I did on a number of
18 matters, yes.

19 Q. Was he your superior or
20 vice versa?

21 A. No.

22 Q. You worked together?

23 A. Yes.

24 Q. Do you recognize him as a



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

1 capable practitioner in the same
2 field that you are in?

3 MR. HARRIS: Objection to
4 the form.

5 THE WITNESS: No, I don't.

6 BY MR. FACKENTHAL:

7 Q. Can you explain why?

8 A. I don't consider Dr. Mink
9 to be a competent professional.

10 Q. For what reason?

11 A. My experience with him.

12 Q. Explain everything that you
13 can about that, please.

14 A. His experience while
15 working at Environ led a number of
16 people within Environ to conclude
17 that he was not operating to the
18 standards that Environ requires for
19 somebody in his position.

20 Q. Again, can you elaborate on
21 that?

22 A. He would, on the matters
23 that I was involved with, would offer
24 opinions that he was not qualified to



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 offer.

2 He would describe himself
3 as having expertise in areas that he
4 clearly did not have expertise. He
5 would exaggerate his experience.
6 That was enough for us.

7 Q. When you say enough for us,
8 was his leaving of Environ his choice
9 or Environ's choice?

10 A. I believe the euphemism
11 that's used is that it was mutual.

12 Q. Well, subtract the
13 euphemism from it. What was the
14 reality of it?

15 A. I was not involved in his
16 leaving, so I couldn't say anything
17 more than that.

18 Q. Did you read his
19 deposition?

20 A. I don't believe I was
21 provided with his deposition.

22 Q. I am going to give you a
23 couple of pages of his report.

24 MR. HARRIS: Should we mark



James DeCrescenzo Reporting, LLC

215.564.3906

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 it, Ed?

2 MR. FACKENTHAL: If you
3 want. Pages 2 and 3 of his report.

4 MR. HARRIS: Ed, you have
5 given us a draft.

6 MR. FACKENTHAL: Yes.
7 Frankly, that's all I have.

8 MR. HARRIS: I mean, I
9 don't care. I just want to make
10 sure --

11 MR. FACKENTHAL: It is.
12 The language is the same as in the
13 final report.

14 MR. HARRIS: Okay.

15 (Vandeven Exhibit 15 was
16 marked for identification.)

17 BY MR. FACKENTHAL:

18 Q. And on those pages two and
19 three there are a number of -- seven
20 bullet items, and I want to go over
21 those and find what you agree with
22 and what you disagree with.

23 Starting right at the top,
24 "The spent pickle liquors alleged to



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 have been released at the site during
2 the late 1960s and 1970s would have
3 consisted of primarily weak
4 hydrochloric acid containing trace
5 amounts of chlorinated iron, nickel
6 and other trace metals."

7 Do you agree with that?

8 A. I don't have any basis to
9 agree or disagree with that. I
10 haven't seen anything that indicates
11 that it was --

12 Q. Incorrect?

13 A. -- that it was weak
14 hydrochloric acid or that the levels
15 were trace amounts of iron and
16 nickel.

17 Q. The next sentence, "This
18 spent cleaning solution was in
19 essence rusty water with a low level
20 of hydrogen ions in solution."

21 Do you agree with that?

22 A. Well --

23 MR. HARRIS: Could we
24 clarify what you are asking him?



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 MR. FACKENTHAL: Yes.

2 Whether he agrees with that
3 statement, with that sentence that I
4 just read.

5 MR. HARRIS: But, I mean,
6 as relating to what, though?

7 MR. FACKENTHAL: I don't
8 follow what your question is.

9 MR. HARRIS: Are we talking
10 about any particular pickle liquors,
11 are we talking about pickle liquors
12 that were disposed of at the site,
13 are we talking about pickle liquors
14 that anybody reviewed in his report?

15 We have gone back and forth
16 between what you are calling ferric
17 chloride and pickle liquors.

18 MR. FACKENTHAL: Okay. We
19 are talking about pickle liquors in
20 general -- pickle liquors in general.

21 MR. HARRIS: Okay. Whether
22 or not they were disposed of at the
23 site.

24 THE WITNESS: Okay,



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 referring to that second sentence.

2 BY MR. FACKENTHAL:

3 Q. That second sentence,
4 right.

5 A. Well, rusty water is a, I
6 guess at best I could characterize
7 that as a nontechnical term, so I'm
8 not sure what he means by in essence
9 rusty water.

10 Q. All right. Focus on the
11 rest of the sentence.

12 A. Okay.

13 Q. Do you agree or disagree
14 with that?

15 A. Again, I don't have any
16 basis to agree or disagree that it
17 had a low level of hydrogen ions in
18 solution. In essence, I have no
19 basis to agree or disagree to what
20 the pH of that solution was.

21 Q. Well, if it were ferric
22 chloride, would that in any way help
23 you to in your agreement or
24 disagreement with that part of the



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 sentence?

2 A. The paragraph says that it
3 contains hydrochloric acid.

4 Q. Let's back up a little bit.
5 Ferric chloride is iron and
6 hydrochloric acid, is it not?

7 A. Ferric chloride is iron and
8 chlorine.

9 Q. Right. When you are
10 talking about a pickle liquor of
11 hydrochloric acid, is ferric chloride
12 the same thing as that?

13 A. No.

14 Q. Look at the last sentence
15 there, "These solutions --" assuming
16 what Dr. Mink has said in the earlier
17 part of that form, "These solutions
18 could not have contributed to the
19 costs of any of the response actions
20 directly or indirectly."

21 Do you agree with that or
22 disagree with that?

23 A. I disagree with that.

24 Q. For the reasons you have



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 talked about in the last couple of
2 days?

3 A. Correct.

4 Q. Can you quantify in any way
5 the part of the cost of the remedies
6 that we were talking about a little
7 bit earlier that the pickle liquors
8 generally, pickle liquors have played
9 in that and at what fraction of the
10 costs?

11 A. No. I was not asked nor
12 did I develop any cost allocation for
13 this case.

14 Q. Do you believe that the
15 pickle liquors were one of the
16 elements that drove the remedy?

17 A. I believe that pickle
18 liquor waste if disposed of at the
19 site contributed to the need for the
20 remedy and the cost of the response
21 actions, yes.

22 Q. But you can't quantify that
23 in any way, whether it is one percent
24 or 99 percent?



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 A. I haven't attempted to
2 quantify that.

3 Q. What would you have to know
4 in order to quantify that?

5 A. A number of things,
6 depending on exactly what your
7 objective was. You would need to
8 know a lot more about the waste that
9 was disposed of and where it was
10 disposed and many things that I did
11 not investigate for my opinions.

12 Q. Those assumptions that we
13 talked about a little bit earlier, if
14 it were there and where it was and
15 what it was composed of, you would
16 have to know all that.

17 A. Theoretically, again, if
18 you were attempting to determine
19 specifically how an individual waste
20 contributed to individual elements of
21 the response actions, you would need
22 to know a lot more information.

23 Q. Look at the second bullet
24 and start with the second sentence.



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 And, again, I will read the second
2 sentence for the people on the phone,
3 "The removal actions were undertaken
4 primarily to remove metal drums and
5 associated soils."

6 Do you agree with that?

7 A. I agree that removal of
8 drums and contaminated soils were
9 part of the removal actions, the
10 initial groundwater remedy was part
11 of the removal actions, too.

12 The initial treatment of
13 the residential wells was part of the
14 removal actions.

15 Q. Focusing on the word
16 primarily, do you agree with that or
17 not?

18 A. I'm not sure what he is
19 referring to. Is he referring -- I'm
20 not sure how he is referring to
21 primarily.

22 If he's referring to some
23 cost breakdown, I did not do a cost
24 breakdown. If he is referring to



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 number of hours that it took, I have
2 not done that analysis.

3 Q. The way I read it is the
4 purpose of the removal action. And
5 assuming that's what he meant, would
6 you agree that that was the primary
7 purpose?

8 A. I'm not sure. I don't
9 think that the EPA ranked the
10 relative elements of the removal
11 action in any hierarchy, so I have no
12 basis for saying what was more
13 primary or more important than any
14 other aspect of the removal action.

15 Q. Well, in ranking of
16 Superfund sites I believe you
17 testified in the last day or so, I
18 guess it was the day before yesterday
19 about when it reached a certain
20 numerical rank then it got onto the
21 list, the Superfund list.

22 A. Yes.

23 Q. What elements are taken
24 into consideration there?



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 A. In the ranking process?

2 Q. In the ranking process,
3 generally.

4 A. At this time, which was
5 still prior to the 1990 NCP, the 1985
6 NCP and the HRS at the time
7 considered essentially three -- or
8 four elements; contamination of
9 groundwater, contamination of soil,
10 air contamination and risk of fire
11 and explosion.

12 So particularly prior to
13 1990 if there was contamination of
14 groundwater that was currently being
15 used, that is currently a potable
16 drinking water system that was
17 contaminated, that was enough to get
18 you above a 28 and a half on the HRS.

19 If you had a site that
20 contained drums, that was enough to
21 instigate a removal action at a
22 Superfund site. So those are some of
23 the factors that were used regarding
24 the listing of the Boarhead Farms



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 site.

2 Q. And so when he says the
3 actions were undertaken primarily to
4 remove metal drums and associated
5 soils, you would not be able to
6 answer whether it was truly primarily
7 to remove those things or not.

8 A. That was just one component
9 of the removal actions.

10 Q. It could have been the
11 other elements that you just
12 mentioned.

13 MR. HARRIS: I think we are
14 having -- I'm just trying to help
15 here. I think we are having a
16 breakdown in communication.

17 You are asking him to focus
18 on specifically the two drum-and-soil
19 removal actions versus the other
20 removal actions?

21 MR. FACKENTHAL: Yes.
22 Dr. Mink said the removal actions
23 were taken primarily to remove metal
24 drums or associated soils.



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 And I think Mr. Vandeven
2 said, well, it could have been that
3 or other considerations which were
4 taken into account back at that time.

5 MR. HARRIS: But the point
6 is there were other removal actions.
7 I think he is struggling with what
8 Mink is referring to. In other
9 words, there were --

10 MR. FACKENTHAL: He is.

11 MR. HARRIS: Yes.

12 MR. FACKENTHAL: Well, he
13 is talking about all four, the
14 removal actions.

15 THE WITNESS: He's talking
16 about all three removal actions; that
17 is, the 1992 and the 1993 and the
18 1995, I believe removal actions. I
19 would assume that's what he is
20 talking about.

21 And my response is that
22 there is no ranking by the EPA as to
23 what is more important and therefore
24 the primary purpose versus what was



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 less important.

2 That's not how they go
3 about doing things. The removal
4 actions address specific threats at
5 the site.

6 Those threats included
7 drums, they included known exposures
8 in private potable wells, and they
9 included contaminated groundwater
10 that needed to be addressed as a
11 non-time critical removal action.

12 BY MR. FACKENTHAL:

13 Q. Mr. Cooley was asking you
14 along those same lines whether you
15 could in any way rank the importance
16 of any of the items found at Boarhead
17 Farms either as health threats or
18 large costs involved in making
19 removals.

20 Did you say that you could
21 not rank them at all?

22 A. I'm saying I did not rank
23 them.

24 Q. You did not?



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDRreporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 A. I did not.

2 Q. Could you rank them? Is
3 there a process whereby you could
4 rank them, focusing first on the
5 costs, the costs involved in
6 remediating?

7 A. I suppose one could,
8 theoretically. I did not, and
9 therefore I don't have an opinion
10 about what was more costly or less
11 costly.

12 Q. Well, if you took something
13 like acid rain, as it existed back at
14 that time, with a pH of close to 7 as
15 opposed to a VOC, you would be able
16 to rank that quite easily, I mean
17 wouldn't you, I mean compare those
18 quite easily as to which would be the
19 more important and which would be the
20 one that should be given attention?

21 MR. HARRIS: Objection to
22 the form.

23 BY MR. FACKENTHAL:

24 Q. And which one would, you



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 know, drive the remedy?

2 A. I thought we were talking
3 about wastes that were disposed of at
4 the site. I'm not sure how acid rain
5 fits in.

6 Q. Well, we are talking about
7 the situation at the site. We are
8 talking about two things which could
9 have affected the site.

10 And one is, say, acid rain
11 with a pH of close to 7, and the
12 other is what I suppose everybody
13 would recognize is something which
14 would need immediate attention, like
15 a VOC, that was disposed of at the
16 site.

17 Now, you would be able to
18 rank those quite easily, would you
19 not, as to which one was the most
20 critical and which one is going to be
21 the more costly to treat?

22 MR. HARRIS: Objection to
23 the form.

24 THE WITNESS: I'm not --



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 the EPA Superfund process does not
2 respond to acid rain.

3 BY MR. FACKENTHAL:

4 Q. I know that. I'm talking
5 about -- all right, let me make
6 another example.

7 This is a hypothetical, of
8 course.

9 A disposal of a small
10 amount of a weak acid, using the
11 example citric acid or acidic acid,
12 at someplace on the site as opposed
13 to a disposal of VOC on the site,
14 would you be able to rank between
15 those two which would be the more
16 important, which would be -- which
17 would drive the remedy and which
18 would be the more costly to attend
19 to?

20 MR. HARRIS: Objection to
21 the form.

22 THE WITNESS: It's
23 possible, yes.

24 BY MR. FACKENTHAL:



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 Q. And it would be the VOC
2 that would be the more costly and the
3 one that would require the immediate
4 attention?

5 MR. HARRIS: Objection to
6 the form.

7 THE WITNESS: Not
8 necessarily, no.

9 BY MR. FACKENTHAL:

10 Q. Why do you say that?

11 A. Well, you could -- in the
12 hypothetical that you have introduced
13 all you have said is that the only
14 two characteristics are one is a weak
15 acid, one is a small amount of VOC,
16 you have said nothing about the
17 volume.

18 So I could have a tanker
19 truck of acidic acid and my wife
20 spilling her nail polish remover that
21 has acetone in it, a VOC.

22 So, you see how there's
23 almost nothing about this that lends
24 itself to generalities when you are



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 talking about allocating or
2 determining what costs more to
3 address.

4 Q. You would have to know a
5 lot more about it, you would have to
6 know about volume and you would have
7 to know about the timing?

8 A. You would need to know a
9 number of factors.

10 Q. If you were going to equate
11 those?

12 A. If you are going to attempt
13 to allocate, yes.

14 Q. Look at the third bullet,
15 this is Page 2.

16 Looking at the third bullet
17 where it has "The cost of the
18 response actions taken to date were
19 primarily incurred due to migration
20 of organic solvents (chlorinated
21 ethenes, benzene, 1, 2 - DCA,
22 ethylbenzene, methylene chloride and
23 1, 2 - DCP) and to a lesser
24 methylenetals such as arsenic,



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 chromium, nickel and cadmium -- "

2 (Discussion off the
3 record.)

4 MR. HARRIS: Okay, where
5 were we?

6 BY MR. FACKENTHAL:

7 Q. -- chromium, nickel and
8 cadmium into the shallow/intermediate
9 groundwater, associated surface
10 water, and nonaqueous NAPL underlying
11 the Boarhead Farms site."

12 Do you agree with that
13 sentence, and if not, why not?

14 A. Well, again, at the most
15 basic level I don't agree with it
16 because the word primarily introduces
17 a hierarchy or a ranking which I have
18 not done which is clearly if one were
19 to do that would require a lot more
20 detailed evaluation than the
21 generalities that presented here, so
22 that would be the basic reason why I
23 don't agree with this statement.

24 Q. And the next sentence, "The



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDRreporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 pattern of contamination at the site
2 clearly demonstrate that this liquid
3 solvent and heavy metal contamination
4 originated from the areas of drum
5 burial on-site and migrated via site-
6 associated waters (ground and
7 surface) as well as nonaqueous phase
8 liquids."

9 Do you agree with that
10 sentence? Strike that question. Do
11 you disagree with that sentence?

12 A. I would say that I disagree
13 with that sentence to the extent that
14 it implies that there is a clear
15 distribution of contamination and a
16 clear and complete understanding of
17 the sources and areas of
18 contamination at the site.

19 Even the RI notes that a
20 complete understanding of where
21 materials may have been disposed of
22 at the site is not known, so I don't
23 think anything about this site could
24 allow one to say that there's any

**James DeCrescenzo Reporting, LLC**

215.564.3905

InnovatingLitigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 clear demonstration of any
2 characteristic of the site.

3 Q. Do you disagree with the
4 part that says the "pattern of
5 contamination," is that what you are
6 talking about?

7 A. That's correct. Right, the
8 pattern or distribution of
9 contamination.

10 Q. You would say it's
11 indefinite enough that his statement
12 would be inaccurate?

13 A. Or at best this particular
14 sentence is incomplete. It's likely
15 that contamination at the site did
16 originate from areas of drum burial.

17 But I don't think it's
18 correct to say that those were
19 necessarily the only areas that were
20 sources of contamination at the site.

21 Q. Any other areas that you
22 know that?

23 A. That were what?

24 Q. Sources of contamination at



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 the site.

2 A. Areas where bulk wastes
3 were disposed of would be areas of
4 contamination, and any other area
5 where DeRewal disposed of wastes
6 would be areas of contamination.

7 Q. You don't know where they
8 were, though, do you?

9 A. Completely?

10 Q. At all.

11 A. No. There is some
12 indication of some specific areas
13 where wastes were disposed of.

14 Q. Bulk, bulk wastes?

15 A. Bulk wastes. But again as
16 the RI states, nobody knew at the
17 time of the RI or today completely
18 where those areas are.

19 Q. The next bullet, the fourth
20 bullet on Page No. 2, "Spent pickle
21 liquors (primarily weak less than
22 five percent hydrochloric acid
23 containing inert ferrous chloride and
24 traces of metals such as zinc, nickel



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 and dilute mineral oil compounds at
2 this site) allegedly disposed in bulk
3 on-site after 1969 could not have
4 substantially altered the pH of the
5 site soils or contributed
6 significantly to the toxicity,
7 mobility or persistence of any of the
8 site chemicals of concern found to
9 drive the response actions."

10 Is there anything that you
11 can add to what you have already
12 testified to about whether you agree
13 or disagree with that long sentence?

14 A. No. I think this would be
15 a perfect example of a sentence that
16 is the opposite of what I have said;
17 that is, that all wastes at the site
18 contributed in some manner to the
19 need for and cost of remediation at
20 the site.

21 Q. And the next bullet, this
22 is on No. Page 3, "Select metals from
23 buried waste drums (arsenic,
24 hexavalent chrome, cadmium, lead,

**James DeCrescenzo Reporting, LLC**

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 zinc, so forth) contributed to the
2 cost of the remedy in a significant
3 way primarily through drum/soil
4 excavation and to a lesser extent
5 metals precipitation treatment of
6 groundwater."

7 Do you disagree with that?

8 A. I don't disagree that it
9 contributed to the cost of the
10 remedy. I have not done anything to
11 determine how significant those costs
12 were compared to any other costs at
13 the site.

14 Q. The next bullet, "The
15 nature and extent of the metals
16 contamination in the site soils and
17 associated shallow groundwater
18 suggest background sources at the
19 site were significant contributors to
20 the elevated analytical results
21 reported in the RI/FS."

22 Just stopping with that
23 sentence, do you agree with that?

24 A. I don't have -- I don't



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 recall seeing anything that said that
2 the natural background levels in the
3 soil were significant contributors to
4 the analytical results.

5 They may have contributed,
6 but I have seen nothing that says
7 they were significant contributors.

8 Q. Do you remember what the
9 RI/FS said about the background?

10 A. Not specifically, no.

11 Q. Well, can you disagree with
12 what he said in that respect? You
13 say you don't remember.

14 A. I'm saying that I don't
15 have any information that would allow
16 me to say the degree to which they
17 contributed to the elevated
18 analytical results.

19 As we talked about
20 yesterday, the diabase at this site
21 does have naturally high levels of
22 metals, and to the extent that those
23 metals may have been mobilized by
24 acids disposed of at the site, those



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 naturally occurring metals could have
2 contributed to the analytical results
3 reported in the RI/FS.

4 Q. Look at the last bullet
5 where Dr. Mink is of the opinion, and
6 I'm reading now, "Over 95 percent of
7 the response actions' cost at the
8 site to date has been driven by
9 organic solvents released from
10 buried/stored drums on-site."

11 Do you have anything to
12 add, other than what you have already
13 testified to, about that sentence?

14 A. No. I don't have anything
15 to add. I have no idea where that
16 numerical --

17 Q. 95 percent?

18 A. Yes. I have no idea where
19 that came from.

20 Q. Do you disagree with this
21 sentence?

22 A. I have no basis for
23 determining how he developed that 95
24 percent, so I would say that I would



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 not agree with that.

2 Q. Now, the next sentence in
3 the last bullet, "Their migration to
4 shallow/intermediate groundwater has
5 necessitated the removal and
6 remediation of approximately 80,000
7 cubic yards of site soils."

8 That's true, is it not?

9 A. I'm not sure what that
10 pronoun refers to, "their."

11 He's talking about
12 apparently organic solvents released
13 from the buried and stored drum
14 sites, the drums on site.

15 Well, clearly the response
16 to the drums and the soils on site
17 was conducted for reasons more than
18 just organic solvents. There were
19 metals contained in the drums, there
20 were metals contained in the soils.

21 We talked just a little bit
22 ago about the fact that some of the
23 costs of the drum removal and
24 disposal was due to the fact that



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 they were characteristic hazardous
2 wastes because of their metals
3 concentrations, so I would not agree
4 with that statement.

5 Q. Do you remember whether
6 ferric chloride was one of the items
7 mentioned in the chemicals of
8 potential concern?

9 A. I don't recall if it was or
10 not.

11 Q. Do you know whether it is
12 included within the chemicals of
13 concern?

14 A. I don't know if it is or
15 not.

16 Q. Do you know whether it is
17 mentioned in the ROD at any place;
18 that is, that that's one of the
19 things to be remediated?

20 A. I believe that iron is
21 mentioned in the ROD, but I would
22 have to go back and review the ROD to
23 determine where it's mentioned and in
24 what context it's mentioned.



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 Q. Are you sure that it's
2 mentioned in there someplace?

3 A. Iron?

4 Q. Yes. In the ROD.

5 A. I couldn't -- I would have
6 to go back and look at the ROD to
7 determine if it is mentioned and in
8 what context.

9 Q. You would remember if it
10 were an item that had to be
11 remediated.

12 A. Without the ROD in front of
13 me, I wouldn't necessarily remember
14 that, no.

15 Q. Is that something you could
16 find easily if you had the ROD in
17 front of you?

18 A. I would have to look
19 through the ROD.

20 Q. I mean it would take time.

21 A. I would have to review the
22 entire ROD, yes.

23 Q. You testified yesterday,
24 and today too, I believe, about the



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDRreporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 buffering effect that certain soils
2 had on acids and that acids would
3 reduce the spill of acids or the
4 placement of acids on the soil would
5 reduce the buffering effect of them.

6 Is that correct?

7 A. It would take up or deplete
8 the buffering capacity of the soil,
9 yes.

10 Q. Is that something that is a
11 permanent effect on the soils, or is
12 that something that regenerates over
13 a period of time?

14 A. It can -- it's not
15 necessarily an irreversible process.
16 Almost nothing in the environment is
17 an irreversible process.

18 Q. Can you explain that in a
19 little more detail what buffering
20 means and why it would be harmed by
21 acid and why it would not be
22 irreversible?

23 A. If you introduce an acid to
24 soil and that acid again has a --



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 increases the hydrogen ion
2 concentration of the environment, be
3 it the saturated zone or the
4 unsaturated zone, soil particles that
5 may have a, either because of a
6 physical process, like adsorption, or
7 a chemical process, say a negatively
8 charged compound on the soil, can
9 take up those hydrogen ions and
10 therefore reduce the pH, if you will,
11 of the acid or of the liquid that the
12 acid is in.

13 So that's generally how
14 that buffering capacity would work.

15 So that process can be --
16 that process is not necessarily
17 irreversible; that is, you could have
18 situations where the negative charge
19 of the soil particle or the ability
20 of the soil to adsorb hydrogen ions
21 is regenerated over time, either be
22 it through some introduction of a
23 negatively charged, depending on the
24 characteristics of the subsurface,

**James DeCrescenzo Reporting, LLC**

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 say oxygen, which would be a
2 negatively charged, which would lend
3 a negative charge to the soil, that
4 could reverse or bring back a
5 buffering capacity to the soil over
6 time.

7 Q. When you say over time, can
8 you give us a range of what you are
9 talking about when you say over time,
10 are you talking days, weeks, months
11 years, what are you talking about?

12 A. It could be anything within
13 that time frame, depending on many --
14 that depends on many factors. It
15 could be relatively short-term or it
16 could take a longer period of time.

17 Q. Well, make an example. If
18 a tanker load of pickle liquor, as
19 you have described in your
20 supplemental report, that type of
21 pickle liquor were deposited say at
22 Boarhead Farms and it were say a five
23 percent solution, what else would you
24 have to know in order to tell whether



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 the buffering effect which would be
2 limited by that could be regenerated,
3 what would you have to know?

4 A. You would have to know a
5 lot about the geochemistry of the
6 soil, what the soil particles were
7 made of, what other elements were in
8 the soil.

9 You would need to know
10 something about or a lot about the
11 physical properties of the soil, what
12 the porosity was.

13 You would need to know what
14 the oxygen concentration was and what
15 the concentration of other electron
16 acceptors were.

17 So that kind of
18 geochemistry is extremely
19 complicated, and even a prediction
20 about the buffering capacity of soil
21 or how long it takes to deplete the
22 buffering capacity and certainly how
23 long it would take to regenerate the
24 buffering capacity is a very



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 complicated and complex evaluation.

2 Q. And as you said, it could
3 be a very short time, it could be a
4 very long time depending upon a lot
5 of factors that we just don't know.
6 Right?

7 A. That I don't know sitting
8 here right now.

9 Q. That's what I'm asking.

10 A. Correct.

11 Q. One of the documents
12 referred to yesterday, not introduced
13 into evidence, I believe, but
14 referred to was a paper entitled
15 Behavior of Metals in Soils. Do you
16 remember that?

17 A. No, I don't.

18 Q. It was one of the things
19 that you reviewed, one of the things
20 that was circulated to counsel.

21 MR. HARRIS: Jeff had it.
22 "Ground Water Issue Behaviors of
23 Metals in Soils," October 1992 EPA
24 whatever.



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDRreporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 BY MR. FACKENTHAL:

2 Q. Do you have that in front
3 of you?

4 A. Yes.

5 Q. I copied a piece from Page
6 20. Will you turn to Page 20?

7 A. Okay.

8 Q. I found a part where it
9 says "Metals added to soils." Do you
10 find a sentence beginning that way?

11 A. The first sentence under
12 the title Summary?

13 Q. "Metals added to soils
14 would normally be retained at the
15 soil surface."

16 A. Yes.

17 Q. I will read the part that I
18 want, and then I will ask you if you
19 can comment on that.

20 Metals added to soils would
21 normally be retained at the soil
22 surface. "Movement of metals into
23 other environmental compartments,
24 i.e. groundwater, surface water or



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 the atmosphere should be minimal so
2 long as the retention capacity of a
3 soil is not exceeded.

4 The extent of movement of
5 metal in the soil is intimately
6 related to the solution and surface
7 chemistry of the soil and to the
8 specific properties of the metal and
9 the associated waste matrix."

10 Did I copy that correctly?

11 A. You read it correctly, yes.

12 Q. That's what I'm saying. Do
13 you agree with that paragraph?

14 A. Yes, I do.

15 Q. Focusing first on the first
16 sentence, "Metals added to soils
17 would normally be retained at the
18 soil surface."

19 Is there any reason for you
20 to believe that metals deposited at
21 the Boarhead site would not normally
22 be retained at the soil surface?

23 A. Yes.

24 Q. And the reasons?



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDRreporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 A. Well, any number of
2 reasons. Probably first and foremost
3 is that they find them in significant
4 concentrations in the groundwater at
5 the site.

6 Q. Well, stop there for a
7 minute. They found metals in the
8 groundwater, but can you relate the
9 metals that they found in the
10 groundwater to any of the alleged
11 deposits from the generators in this
12 case?

13 A. Well, I believe that the
14 metals in the groundwater at the site
15 and the elevated levels of metals in
16 the groundwater at the site came from
17 the wastes that were disposed of at
18 the site.

19 Q. Which metals are you
20 talking about?

21 A. The entire list of -- at
22 least a substantial number of the
23 metals that were listed in the ROD,
24 that were listed in the RI/FS.



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 Q. Do you know if iron was one
2 of them?

3 A. If iron was one of the --

4 Q. Ones listed in the RI/FS.

5 A. Again, I don't know if iron
6 was listed in the RI/FS. I would
7 have to go back and look at it.

8 Q. Go ahead. You said there
9 was a number of reasons and I stopped
10 you at the first one. What are the
11 other ones?

12 A. Okay. Just sticking with
13 this paragraph, this says, "The
14 extent of movement of a metal in the
15 soil system is intimately related to
16 the solution and surface chemistry of
17 the soil and to the specific
18 properties of the metal and
19 associated waste matrix."

20 So this is just almost
21 exactly what we have been saying over
22 the last two days. The solution that
23 we are talking about here is for the
24 bulk wastes that were deposited at



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 the site was a solution that was
2 acidic.

3 And therefore the movement
4 of those metals would have been
5 increased, the mobility of those
6 metals would have been increased
7 because, as this says, the extent and
8 movement of a metal in soil is
9 intimately related to the solution,
10 in our case it's an acidic waste, and
11 it's also related to the specific
12 properties of the metal and
13 associated waste matrix.

14 The properties of our waste
15 matrix here are waste matrices that
16 are acidic in nature, and therefore
17 the metals would be more mobile in
18 the soil system and would not be
19 retained just in the surface soil.

20 Q. Well, looking again at the
21 quotation that I believe is in your
22 supplemental report from the RI.

23 And I believe this is
24 something that you and Mr. Pettit



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 went over this morning, I think it is
2 Page 5-4.

3 It says, "The effect of
4 acid spills probably were short-lived
5 because the acids would have been
6 flushed in the soil by infiltrated
7 water and possibly would have been
8 neutralized by the limited buffering
9 capacity of the soil."

10 Isn't what I just read
11 there from the RI a little bit
12 different from what you just said
13 about the quotation from the study
14 that we just went over?

15 A. I'm not sure. You
16 referenced my supplemental report, I
17 guess you meant my rebuttal report,
18 but then you read from something that
19 was clearly not my rebuttal report.

20 Q. I'm sorry, I thought I
21 did.

22 A. You said Page 5-4?

23 MR. HARRIS: Just to help
24 things along, I think he is



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 mentioning that you had referenced
2 several portions of the RI talking
3 about the short-lived issue in your
4 rebuttal report, one of which was the
5 sentence that he read.

6 MR. PETTIT: The reference
7 to 5-4 is the remedial investigation
8 page number.

9 THE WITNESS: Is there a
10 specific question asked?

11 MR. FACKENTHAL: I'm
12 looking for the part of his -- here
13 it is, Page 5.

14 MR. HARRIS: That page has
15 a couple references to sections of
16 the RI.

17 BY MR. FACKENTHAL:

18 Q. It's the third bullet on
19 Page 5 of your supplemental report,
20 or your rebuttal report, I guess is
21 what you call it. And what I read I
22 think is identical to what you have
23 in the beginning of your third
24 bullet. Are we straight on that now?



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 A. I'm not -- I think I know.
2 I think we are on the third bullet of
3 Page 5 of my rebuttal report. I'm
4 not sure what the question is.

5 Q. Yes. We just read from the
6 part of the metals in groundwater
7 study, and you also read that third
8 bullet on Page 5 of your report, and
9 to me they seem to be a bit
10 inconsistent.

11 And I was wondering if you
12 could explain the difference between
13 those two; that is, your explanation
14 of the paragraph that we read from
15 the study and the quotation from the
16 remedial investigation on Page 5 of
17 your supplemental report?

18 A. I'm still confused as to
19 what the real issue is.

20 Q. Well, as I read the
21 quotation from the remedial
22 investigation it says that the acid
23 spills are short-lived and they would
24 have been flushed from the soil.



James DeCrescenzo Reporting, LLC

215.564.3905

InnovatingLitigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 But the other one seems to
2 me to say, or from what you testified
3 to, was that they would not, the
4 metals which were mixed with the acid
5 spills, were mixed with the acids
6 would not normally be retained at the
7 soil surface, that they would move.

8 Do you understand what I'm
9 saying now?

10 A. Not entirely, but I think I
11 can attempt to answer your question
12 or clear up the confusion.

13 Q. I wish you would.

14 A. And I think we talked about
15 this a little earlier today.

16 When they say the effects
17 of acid spills were probably,
18 probably were short-lived, I think
19 when they are talking about short-
20 lived they are talking about how long
21 the acid that spilled can mobilize
22 material in the soil.

23 So if you spill a load of
24 acid onto the soil, it's going to



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 mobilize metals that are in the soil,
2 or mobilize metals that were
3 deposited in the soil. And once
4 those metals become mobile they will
5 migrate.

6 The ability of that
7 original acid spill to keep
8 mobilizing metals is what they are
9 referring to as short-lived. It is
10 not going to keep mobilizing metals
11 indefinitely.

12 It will be buffered by the
13 buffering capacity or neutralized by
14 the buffering capacity of the soil,
15 but the metals that it liberates will
16 continue to migrate.

17 And so that statement is
18 not inconsistent at all with the
19 paragraph that we read from, this
20 behavior of metals and soils
21 document.

22 Q. Maybe that's what's
23 confusing me. Why would it continue
24 to migrate? If they were initially

**James DeCrescenzo Reporting, LLC**

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 deposited on the surface and the
2 effect of the acid spills were short-
3 lived, why would they continue to
4 mobilize?

5 MR. HARRIS: Objection to
6 the form.

7 THE WITNESS: Are you
8 talking about metals that are
9 deposited on the surface soil in an
10 acidic waste?

11 BY MR. FACKENTHAL:

12 Q. That's correct, yes.

13 A. Okay. And why would
14 they --

15 Q. Continue to mobilize, I
16 think that was your expression a
17 minute ago.

18 MR. HARRIS: Migrate.

19 THE WITNESS: They will
20 continue to migrate, as this
21 paragraph says, that the extent of
22 movement, how far they migrate, how
23 they continue to migrate is related
24 to the solution, i.e. the acid and



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 the acidity of that solution and the
2 waste matrix.

3 So if you have a waste
4 matrix or solution that's acidic in
5 nature, that metal will not be
6 retained at the surface, it will
7 continue to migrate downward.

8 BY MR. FACKENTHAL:

9 Q. Mr. Cooley was asking you
10 about that, what was it, a 1973
11 spill, and the comment that, oh, what
12 was it, that some time afterwards
13 that there was a distressed
14 vegetation at some distance from the
15 spill site.

16 Do you see a causal effect
17 with the spill and that distressed
18 vegetation which could be limited to
19 just the spill?

20 A. It could be limited to that
21 spill or that spill could have been
22 one of any number of contributors to
23 that distressed vegetation.

24 Q. I guess that's really what



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 I'm asking. If you eliminated any
2 other cause, would that spill itself
3 be enough to cause that distressed
4 vegetation?

5 A. It could. All I'm doing is
6 summarizing and noting what was in
7 the RI regarding that spill and the
8 impact of that spill.

9 But it's not -- it's
10 certainly not -- considering what we
11 know about the site, it's certainly
12 possible that a spill or a discharge
13 back in that time period could have
14 impacted the site in that way, i.e.,
15 distressed the vegetation and
16 contributed to fish kills in the
17 creek.

18 Q. It could do that by itself?

19 A. Absolutely.

20 MR. FACKENTHAL: I think
21 that's all I have.

22 MR. HARRIS: On the phone,
23 anybody still there? Anybody want to
24 ask questions?



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 MR. SABINO: This is Tom
2 Sabino. I have no questions. Thank
3 you, Mr. Vandeven.

4 MS. FLAX: Melissa Flax. I
5 have no further questions.

6 MS. WRIGHT: I'm Lynn, I
7 have no further questions.

8 MR. HARRIS: Guys?

9 MR. PETTIT: Give us a
10 minute, please.

11 THE WITNESS: I'm going to
12 make a quick call.

13 (Recess taken)

14 EXAMINATION

15 BY MR. COOLEY:

16 Q. I have a question. You
17 know, it could lead to just one or
18 two follow-ups on the same subject.

19 MR. HARRIS: Take a shot.

20 MR. COOLEY: Sure.

21 BY MR. COOLEY:

22 Q. Mr. Vandeven, my question
23 is whether you have any experience
24 either working on a project or



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 through research efforts with the
2 subject of the corrosion of metal
3 drums?

4 A. I've worked on sites where
5 releases from drums and the corrosion
6 of metal drums as the release
7 mechanism was important, but I think
8 that's the extent of what my
9 experience is on that issue.

10 Q. Okay. So just to be clear,
11 am I correct in taking your answer to
12 mean that you haven't ever had
13 occasion to learn about or have any
14 particular specialized knowledge
15 about the rate of corrosion or the
16 factors that would accelerate in or
17 decelerate in and in what ways the
18 corrosion of metal drums in the
19 subsurface?

20 A. Oh, no, I wouldn't say
21 that. I would say that I do have a
22 fair amount of knowledge on that
23 through case work on sites that
24 include the corrosion of metal drums



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 and metal tanks on the subsurface.

2 Q. Well, maybe we are talking
3 about two different things.

4 Do you have any specialized
5 or particular knowledge about the
6 rate at which metal drums corrode
7 under different conditions and how to
8 calculate or determine or predict the
9 rate at which metal drums would
10 corrode?

11 MR. HARRIS: Objection to
12 the form.

13 THE WITNESS: I don't have
14 any particular expertise on
15 determining the rate.

16 I would say that I have a
17 fair amount of knowledge on the
18 conditions that lead to a
19 deterioration of metal drums in the
20 subsurface.

21 BY MR. COOLEY:

22 Q. But on the subject of rate,
23 for example, you have not studied the
24 relative rate of corrosion of a new



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

1 drum as opposed to a once-used drum
2 as opposed to an oft-used 10-year-old
3 drum or the like when disposed of in
4 the subsurface?

5 A. No, I have not.

6 MR. COOLEY: That's all I
7 have.

8 MR. HARRIS: Anything
9 further?

10 MR. PETTIT: No.

11 (Thereupon, at 4:03 p.m.
12 the deposition concluded.)
13
14
15
16
17
18
19
20
21
22
23
24



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

DEPOSITION OF JAY VANDEVEN, VOLUME II, 2/14/07

WITNESS CERTIFICATION

I hereby certify that I
have read the foregoing transcript of
my deposition testimony, and that my
answers to the questions propounded,
with the attached corrections or
changes, if any, are true and
correct.

DATE----- JAY VANDEVEN-----

PRINTED NAME-----



James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDReporting.com

FAX 215.751.0581

O

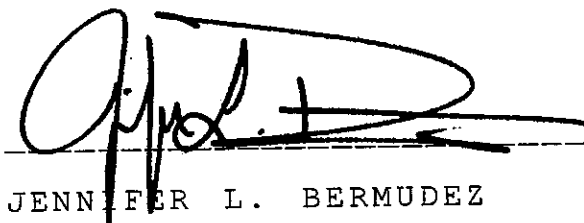
C

C

CERTIFICATION

I, JENNIFER L. BERMUDEZ, a Court Reporter in and for the Commonwealth of Pennsylvania, hereby certify that the foregoing is a true and accurate transcript of the deposition of said witness who was first duly sworn by me on the date and place hereinbefore set forth.

I FURTHER CERTIFY that I am neither attorney nor counsel for, nor related to or employed by, any of the parties to the action in which this deposition was taken, and further that I am not a relative or employee of any attorney or counsel employed in this action, nor am I financially interested in this case.



JENNIFER L. BERMUDEZ

Court Reporter and Notary Public

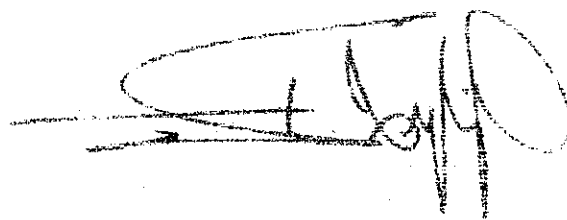


James DeCrescenzo Reporting, LLC

215.564.3905

Innovating Litigation
1880 JFK Blvd., 6th Floor, Philadelphia, PA 19103
www.JDRreporting.com

FAX 215.751.0581

A handwritten signature in black ink, appearing to be "J. Edgar Hoover", written in a cursive style. The signature is located in the lower right quadrant of the page.